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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,507	11/25/2003	Hans Hesse	22654	1831

535 7590 06/17/2004

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EXAMINER

NGUYEN, CHAU N

ART UNIT PAPER NUMBER

2831

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/724,507	Applicant(s) HESSE, HANS	
	Examiner Chau N Nguyen	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Boyd (4,499,341).

Boyd discloses an assembly (Figs 1-3) for electrically interconnecting two parts relatively rotatable about an axis, the assembly comprising an elongated multiconductor flat ribbon having a pair of ends and wound in a spiral centered on the axis, one of the ends being secured to one of the parts and the other of the ends being secured to the other part.

3. Claims 1-8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnston et al. (2003/0068912).

Johnston et al. discloses an assembly (Figs 1-2) for electrically interconnecting two parts relatively rotatable about an axis, the assembly comprising an elongated multiconductor flat ribbon having a pair of ends and wound in a spiral centered on the axis, one of the ends being secured to one of the parts and the other of the ends being secured to the other part (re claim 1).

Johnston et al. also discloses the one end (22) being secured to the one part inside the spiral and the other end (18) being outside the spiral (re claim 2), the ribbon having a width dimension extending generally parallel to the axis (re claim 3), the ribbon being comprised of a flat elongate tape and a plurality of parallel conductive traces on the tape extending between the ends (re claim 4), wherein the traces are flat strips (34) with a width dimension parallel to the width dimension of the tape (re claim 5), the tape being nonconductive (re claim 6), the tape being flexible (re claim 7), the spiral being generally cylindrical and centered on the axis (re claim 8), the tape being L-shaped and having one leg forming the spiral and another leg extending axially from the spiral (re claim 10).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al.

Claims 9 additionally recites rigid circuit boards being connected to the conductive traces at the ends of the ribbon. Although not specifically disclosed by Johnston et al., it would have been obvious that since the ribbon cable of Johnston et al. is flexible and extensible, one skilled in the art would use the cable of Johnston et al. and connect the ends of the cable to two circuit boards in which the distance between the two boards can be adjusted. Re claim 12, it would have been obvious to one skilled in the art to use a bonding head for the one part (22) of Johnston et al. to meet the specific use of the assembly since it is known in the art for electrically connecting a bonding head to a ribbon cable.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnston et al. in view of Moden (6,362,429).

Claim 11 additionally recites the leg extending axially from the spiral being formed with a loop projecting transversely of the axis. Moden discloses an electrical tape comprising a loop projecting transversely of the tape width (Figs 4

and 5A) near a connection end thereof to provide a strain relief for the tape. It would have been obvious to one skilled in the art to provide a loop as taught by Moden in the leg (32) of Johnston et al. to provide a strain relief for the tape.

Cited Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Burke et al. and Wagner et al. disclose ribbon cables having spiral part.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Chau N Nguyen', with a long horizontal flourish extending to the right.

Chau N Nguyen
Primary Examiner
Art Unit 2831